NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, December 7, 1897.

B. Sachs, M. D., President.

TOXIC TREMOR AND HYSTERIA IN A MALE.

Dr. J. Arthur Booth presented a man whom he had seen one week ago at the French Hospital. The patient, sixty-one years of age, had been engaged up to 1885 as a mirror polisher, using mercury, and since then in the same occupation, but using silver instead. His family history was negative as regards nervous disease. At the age of twenty-two, he contracted syphilis, and was treated for this for some time. He then enjoyed good health up to thirteen years ago. At this time he fell on the street with both lowerand upper extremities in a state of clonic spasm. He was taken to the Boston City Hospital. Some years later was under the care of Professor Charcot for several months. He returned to this country in 1887, and resumed his work of mirror polishing, using silver. He has had three or four attacks of tremor. The present illness began November 17, after having worked very hard for some time previously. The tremors presented by the patient, the speaker said, certainly resembled those observed in cases of mercurial poisoning. A very slight tap on the body would set up a pitiable degree of reflex tremor. There was no nystagmus, but there was slight ataxia. It was found that the tremor was greatly increased when attention was drawn to him, and for this reason it seemed not improbable that there was an hysterical element in the case. There were no bladder or rectal symptoms.

Dr. W. M. Leszynsky said that the case looked to him to be a functional one, added to the evident toxic tremor. The fact that he had such attacks, and had recovered from them, would seem to confirm this view.

Dr. Peterson and Dr. B. Sachs concurred in the opinion that there was marked hysteria imposed upon a mercurial tremor.

NEURITIS FOLLOWING AN INFECTED VACCINATION.

Dr. W. B. Noyes presented a baby. It had been vaccinated last spring, and the wound had become infected. When the bandages had been removed, it had been found that the child could not move the arm. Examination showed that the deltoid, biceps and the muscles supplied by the ulnar nerve were ivolved. They did not react to faradism, and gave the reaction of degeneration. The case seemed to him at the time to be a neuritis resulting from an infected wound, but two other opinions had been offered, viz., that it was the result of tight bandaging; and that the child had an attack of anterior poliomyelitis. The condition had developed within two weeks after the vaccination, and the motion of the arm had been largely recovered. There was no history of constitutional disturbance. His own opinion was, that the case was one of ascending neuritis involving the circumflex, ulnar and musculo-cutaneous nerves.

Dr. Peterson thought that poliomyelitis could hardly be considered. The diagnosis offered by Dr. Noyes might be correct, or else the condition was due to pressure. He inclined rather to the latter view.

PULMONARY TUBERCULOSIS AND TABES COMBINED.

Dr. Fraenkel presented a man thirty-nine years of age, unmarried, whose family history was negative. About ten years ago he contracted syphilis, but enjoyed fairly good health up to two years ago. Then he had repeated hemorrhages from the lungs, and developed rapidly the signs and symptoms of pulmonary tuberculosis. On admission to the Montefiore Home in May, 1896, there were pronounced physical signs of pulmonary tuberculosis, and of a large cavity at one apex, and death seemed near. The left pupil was but slightly responsive to light. The temperature never rose above 98.5 degrees Fahrenheit, and the pulse above eighty. He steadily improved up to May, 1897, at which time his sputum still contained tubercule bacilli, but his condition was in every way better. The signs of the cavity had disappeared. His pupils were unequal and the left was myopic. The scapular, abdominal, gluteal and plantar reflexes were exaggerated on both sides. The left patellar knee-jerk was markedly diminished. There was no evidence of ataxia or inco-ordination. On November 18, 1897, physical examination showed the thoracic organs in the same condition. The patient then complained for the first time of occasional shooting pains in the left lower extremity. The sexual appetite was markedly diminished. The left knee-jerk was greatly reduced. The three points of interest were: (1) The marked unilateral character of the symptoms; (2) the combination of tuberculosis and tabes—a very rare condition; and (3) the mildness of both diseases.

Dr. Leszynsky said that he had seen a number of cases with various forms of disease, both of the lungs and abdomen, with but slight change of pulse and temperature, even in neurotic individuals. He had in mind a patient who showed very markedly unilateral pupillary symptoms such as had been referred to.

Dr. Noyes said that the case appeared to be one of fibroid phthisis. Non-progressive tabes is due rather to a collection of connective tissue than to any actual degeneration of the posterior columns. These two conditions were occasionally associated, and the case presented was probably an example of this.

TIC CONVULSIF.

Dr. Willam Hirsch presented a young man having Tic convulsif. He first saw him about a year ago, and the symptoms had not changed materially since then. The object in bringing the patient was to demonstrate a certain relation between his symptoms and the psychical condition present. On tapping the cheek, the patient made a number of grimaces. The fact that the symptoms had not undergone change was in marked contrast with what was observed in hysteria. This patient had had articular rheumatism, followed by endocarditis and the development of mitral insufficiency. Shortly afterward he had developed this neurosis.

WRY-NECK AND ASYMMETRY OF FACE.

Dr. Graeme M. Hammond presented for Dr. Meirowitz, a boy of sixteen, who had come under observation for the relief of what appeared to be a wry-neck. As far back as could be remembered the neck had been deflected to the left, but he had never experienced any pain in the neck or elsewhere. There had been no twitching or jerking. Examination showed that the head deviated to the left; the left half of the face exhibited a perceptible slope from above downward; the left eyebrow, ala nasi, angle of mouth and angle of jaw were all higher than the corresponding points on the right side. The muscles of the neck were distinctly hypertrophied. The skull over the parietal region showed a perceptible flattening, not observed on the other side. The movements of the head were free in all directions. The hair curved to the left side. There was no disturbance of the cranial nerves, and no hemiatrophy, and the intelligence was normal. There was no family history of similar defects.

Dr. Fraenkel remarked that cases of congenital wry-neck had been explained as resulting from a lessened developmental resistance on one side.

Dr. Peterson remarked that it was unusual to find so good an example of the unequal development of the ear.

Dr. Onuf said that in most cases of congenital wry-neck there was this asymetry of the face. He was not sure that the pressure was alone responsible for the unequal development; it would hardly explain the asymetrical development of the ear. The atrophy seemed to him possibly the result of twisting of the carotid artery on one side, with a consequent interference with the nutrition on that side.

ENORMOUS HYDROCEPHALUS.

Dr. F. Peterson presented the brain from such a case, one of the largest for many years at the Randall's Island institution. The patient was a woman of twenty who, in the early stages, had had a left hemiplegia and imbecility. As the disease progressed, she became diplegic and completely idiotic. The following are the measurements of the head: Circumference 63.5cm.; approximate volume 1,714 cc.; naso-occipital arc 47 cm.; naso-bregmatic arc 16.5 cm.; bregmatic-lamboid arc 19cm.; binauricular arc 50 cm.; antero-posterior diameter 19.5; greatest transverse diameter 18.5 cm.; length-breadth index 94.8 per cent.; binauricular diameter 12 cm.; auriculo-bregmatic radii 20 cm.; facial length 11.2 cm.; empirical greatest height 17.7 cm.; height Beta-x 19.2 cm. At the autopsy the sutures were found fully united and the fontanelles perfectly closed. The skull bones averaged 8 mm. in thickness. The dura was not adherent at any part. There was a very little fluid in the dura. All of the fluid was in the ventricles of the brain, more on the right side than the left, for the cortex of the right hemisphere had become in part membranous. Five pints of clear serum were removed from the ventricles. The third and fourth ventricles partook, to some extent, in the dilatation. It was unfortunate that through a mishap the brain was so injured that the patency of the foramen of Magendie could not be determined. Dr. Peterson said that, in his experience, it was difficult to examine this foramen, and apparently impossible to demonstrate the presence in any human being of the foramina of Mierzejewsky. It was very important in all cases of chronic hydrocephalus to examine, if possible, the foramen of Mierzejewsky. It was much easier to determine the patency of the aqueduct of Sylvius and of the foramen of Monroe. He had, with Dr. Blake, at the Anatomical Laboratory of the College of Physicians and Surgeons, examined the brain of a ten-year-old hydrocephalic of Randall's Island, and in this instance, at least, had determined definitely the permeability of the foramina mentioned, and the aqueduct.

ABSCESS OF THE BRAIN.

Dr. Peterson presented a specimen showing an abscess of the brain that had been operated upon. The case had been seen on September 3, 1897, in the service of Dr. Brown, of the Mountainside Hospital, at Montclair, N. J. The patient was a male, forty-one years of age, who, in an attempt at suicide, had struck his head upon a rusty spike and had sustained a compound depressed fracture in the right occipital region, very near the middle line. He was trephined, and the depressed bone removed. The dura was found uninjured, and was left untouched. The wound became slightly infected, but aside from slight fever no symptoms of importance appeared until two days before he had seen the man, that is, for about two weeks after operation. He then gradually developed in twenty-four hours a left hemiplegia, with left hemianaesthesia. Examination showed complete paralysis of the left arm and leg, with considerable anaesthesia over the paralyzed limbs; slight analgesia in places, and hyperalgesia in others. The plantar and cremasteric reflexes were normal. The knee-jerks were subtypical, slightly greater on the left side. The mind was clear. There was no aphasia, no involvement of the face or tongue. There was no evidence, in pupils or pulse, of intra-cranial pressure, and no symptom of cortical irritation. The temporal half of the field of vision of the left eye was lost. The right seemed normal. He heard a watch at only half the distance with the left ear as compared with the right. Taste was normal on both sides of the tongue. The fundus seemed slightly cloudy. A diagnosis was made of abscess deep in the brain, in the region of the posterior limb of the internal capsule. The surgeon was advised to trephine in the parietal region, considerably back of the motor area, and insert an exploring needle down into the supposed site of the abscess, should the patient grow worse. Two days later this was done. The abscess was found at the site suggested, and was drained. The temperature became normal, the anaesthesia disappeared and the patient moved his left hand, but a few days later he suddenly became worse, and died. The brain was sent to Dr. Peterson for examination. He found the dura very sclerotic over the site of the original injury close to the superior longitudinal sinus. The convolutions of the right hemisphere were considerably flattened. There was no meningitis. Deep in the interior of the right hemisphere was an abscess, about the size of a hen's egg.

HEMIATROPHY OF THE BRAIN.

Dr. Peterson then presented a specimen showing apparent hemiatrophy of the brain. The brain was that of a Randall's Island patient, a man of thirty years, who had been in the idiot asylum for several years. A history of the origin of his trouble could not be obtained. He was a large, heavy man, with a hemiplegia (the arm being much worse than the leg), and with frequent and severe general epileptic convulsions. While able to be about, he was dull and stupid, and in intelligence would be placed in the grade of moderate idiocy. He died in an epileptic fit. There was nothing abnormal in the other organs of his body, but the brain presented the condition of marked right hemiatrophy. There was very slight evidence of microgyria, the convolutions differing as regards normality from those of the opposite side in being somewhat smaller. The membranes over the right hemisphere were, perhaps, somewhat thicker than over the left. An examination of the vessels at the base of the brain showed that the blood supply was apparently equal for the two sides. It was undoubtedly a lack of development through some obscure and early pathological process.

A CASE OF AMYOTROPHIC LATERAL SCLEROSIS—SUPPLEMENTARY REPORT.

Dr. William Hirsch said that on October 1, 1895, he had presented to the Society a case of this kind. The patient was forty-three years of age and had had poliomyeitis at the age of twenty. The clinical symptoms were such, that at that time he had traced them from the old scar in the left anterior horn in the cervical region. The process must have approached the left pyramidal tract, and then after affecting the right horn, spread over to the right side. That was his opinion at that time, and a few such cases had already been presented. In the discussion, it was claimed that the case was one of ordinary progressive muscular atrophy. But further clinical observation of the case showed that this was not the case. The man died on June 3, 1897, and Dr. Hirsch was now able to present microscopical specimens of the spinal cord in different regions, proving the correctness of his diagnosis. He said that in these specimens one could see the connective tissue spreading from the anterior horn to the left pyramidal tract, and the latter converted into connective tissue. The cells in the anterior horns had been destroyed, the connective tissue had formed all through the lateral tract. In the cervical region one bundle of connective tissue had spread backward into the posterior columns, as he had previously diagnosticated. Deep degeneration of the pyramidal tracts could be followed down to the lumbar region.

Dr. Hammond asked how he would differentiate these specimens from progressive muscular atrophy.

Dr. Hirsch replied that the specimens showed that the case was not one of ordinary degeneration of the lateral tracts, but that the connective tissue grew horizontally from the anterior horn to the side. Furthermore, the ordinary progressive muscular atrophy is a symmetrical disease.

Dr. G. M. Hammond said that in three unquestioned cases of progressive muscular atrophy that had been under his observation, there had been a typical degeneration of the pyramidal tracts. On looking up the subject, he had found that Gowers made the statement that he had not seen a case of progressive muscular atrophy in which the pyramidal tracts had not been extensively affected. It was true that in the specimen presented, one horn was affected more than the other, nevertheless both horns were involved.

Dr. C. L. Dana thought these sections looked very much like specimens from a case of progressive muscular atrophy. If the pathological change were not one of degeneration of the horns and lateral columns, he would like to know what Dr. Hirsch thought it really was?

Dr. B. Sachs thought the main point was as to whether the degeneration was strictly bilateral in the lateral columns, or more marked on the side of the old poliomyelitis.

Dr. Dana thought that at the time of the poliomyelitis there had been considerable hemorrhage in the neighborhood of the anterior horns, and the lateral column might have been injured and a scar formed. The degeneration would then be secondary to this scar.

Dr. C. A. Herter said that the fact that the degeneration of the lateral tract was chiefly on one side pointed very strongly to the local nature of the trouble, and opposed the idea of the case being one of progressive muscular atrophy.

Dr. Hirsch said that it was not a descending degeneration, but a growing out of connective tissue from the anterior horns peripherally and laterally in the direction of the pyramidal tracts; and the series of sections that he had made enabled one to follow this branching out of the bundles of connective tissue. This was quite different from an ordinary case of progressive muscular atrophy complicated by a secondary degeneration of the lateral tracts. The specimen presented showed that an old focus in the anterior horn had set up a secondary inflammation. It was difficult to form a correct conception of the case without a careful examination of the whole series of specimens. The case represented one of those processes of inflammation characterized by the formation of connective tissue.

Dr. M. Allen Starr asked Dr. Hirsch if the focus of inflammation in one anterior horn and extending into the adjacent columns might not produce a secondary sclerosis downward through the cord, and so explain the condition.

Dr. Hirsch replied that it extended laterally as well as upward. He had not yet examined the medulla oblongata. The poliomyelitis was in the cervical region of the cord, about the region of the left arm.

UNILATERAL ATROPHY OF THE BRAIN.

Dr. Pearce Bailey reported a case of this kind occurring in a carpenter who was fifty-seven years of age at the time of his death. He had been perfectly healthy up to the forty-seventh year, and had then had an attack of apoplexy. At this time he awoke to find one side powerless, and this power he never regained. The picture was that of extreme left hemiplegia. The atrophy in the paralyzed limbs was not unusual in degree. There was no disturbance of psychical sense functions or general intellectual capacity Speech was clear. In the summer of 1897, he died of acute lobar pneumonia. At the autopsy, the dura mater was found adherent at the right anterior portion of the cranial border. and in the adhesions between the dura and pia was a collection of clear serum. The left hemisphere was normal in size. The whole right hemisphere was much smaller than the left. The unilateral atrophy involved also the brain stem and spinal cord. The right internal carotid artery was less than half the size of the left. The forward portion of the right hemisphere was in a state of advanced chronic softening. Sections from the pre-central gyrus and from the occipital lobe contained few ganglionic elements. The cuneus was affected similarly, though to a lesser degree. Although the frontal lobes, which are supposed to be intimately connected with mental processes, were almost completely obliterated on one side, mentality had not been impaired. It was believed that the lesion occurred after complete cerebral and bodily growth had been attained. It was assumed that the original lesion was a thrombus in the right internal carotid artery, at or near its bifurcation. This case emphasized the necessity for caution in regarding any single region of the brain as indispensable to mental action.

Dr. Herter said that he had no doubt that the extreme degree of atrophy was the result of extensive arterial lesion; possibly the very slow development of the vascular lesion in the frontal region would go far towards explaining the absence of marked cerebral symptoms. In his experience, comprising cases of acute softening and abscess, where there had been extensive destruction of the frontal lobe on one side, there had been considerable interference with the mental functions.

Dr. Dana said that it was remarkable how the faculty of language could be maintained notwithstanding extensive destruction of the right side of the brain.

Dr. Sachs said it seemed to him very evident that Dr. Bailey's case was distinctly vascular in origin, which was in sharp contrast with Doctor Peterson's case.

Dr. Bailey, in closing, said that there seemed to be no doubt that the entire half of the brain in his case had been affected.

A NEW DEVICE FOR ADAPTING THE INCANDESCENT ELECTRIC CURRENT TO THERAPEUTIC PURPOSES.

Dr. A. D. Rockwell demonstrated the action of an apparatus which, he said, comes under the head of shunt controllers, but is of novel construction. It ranges from 1 to 75 volts, and can be varied one volt at a time up to 30 volts, and then 3 volts at a time for the balance. The galvanic current in this way can be readily superimposed upon the faradic, giving most interesting therapeutic results. The movement of the milliampèremeter during the simultaneous passage of the two curents is somewhat greater than when only the galvanic current passes, probably owing to a lowering of the resistance of the body by the faradic current. This combined application had been found by him particularly useful in cases of exophthalmic goitre.

Neurological Fragments. Hughlings Jackson (Lancet, Jan. 2d, 1897).

In this continuation of his series of papers, termed "Neurological Fragments," Hughlings Jackson gives us a consideration of cervical fracture-dislocation. It is an extremely interesting article dealing with symptoms "at the seat of lesion" and "below the seat of lesion," and the effects upon the four systems, namely, the thermal, the respiratory, the circulatory and the digestive. Incidentally certain symptoms from the side of the sexual system are also considered. Jackson indulges in speculation concerning the severance of intrisic and extrinsic fibres, in observations on extremely high temperatures resulting from lesions in this regions (cervical) and upon the effects of the cutting off from the highest, middle and lowest levels (centres).

It is almost impossible to adequately review the paper in question without entering into details, which would involve long quotations from the original. It would be better to read the article in *toto*.

Sterne.